



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Brian A. Vaartstra et al.

Group Art Unit: 2815

Serial No.: 09/603,132

Examiner: E. Lee

Filed: 23 June 2000

Docket No.: 150.0065 0102

Title: DEVICE STRUCTURES INCLUDING RUTHENIUM SILICIDE DIFFUSION BARRIER LAYERS

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Assistant Commissioner for Patents
BOX AF
Washington, D.C. 20231

We are transmitting the following documents along with this Transmittal Sheet (which is submitted in triplicate):

- ☒ An itemized return postcard.
☐ A Petition for Extension of Time for ___ month(s) and a check in the amount of \$___ for the required fee.
☐ An Information Disclosure Statement (___ pgs); copies of ___ applications; 1449 forms (___ pgs); and copies of ___ documents cited on the 1449 forms.
☐ A check in the amount of \$___, for ____.
☐ A certified copy of a ___ application, Serial No. __, filed _____, the right of priority of which is claimed under 35 U.S.C. §119.
☐ Other:
☒ Amendment and Response Under 37 CFR §1.116 (12 pgs total, including Appendix A (3 pgs)).
☒ No Additional fee is required. ☐ The fee has been calculated as shown:

Fee Calculation for Claims Pending After Amendment					
	Pending Claims after Amendment (1)	Claims Paid for Earlier (2)	Number of Additional Claims (1-2)	Cost per Additional Claim	Additional Fees Required
Total Claims				x \$18 =	
Independent Claims				x \$84 =	
One or More New Multiple Dependent Claims Presented? If Yes, Add \$280 Here →					
Total Additional Claim Fees Required					

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 13-4895. Triplicate copies of this sheet are enclosed.

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this Transmittal Letter and the paper(s), as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, BOX AF, Washington, D.C. 20231, on this 14th day of November, 2001.

MUETING, RAASCH & GEBHARDT, P.A.
Customer Number: 26813

By:
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(LARGE ENTITY TRANSMITTAL UNDER RULE 1.8)



PATENT
Docket No. 150.00650102

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Brian A. Vaartstra et al.) Group Art Unit: 2815
Serial No.: 09/603,132) Examiner: E. Lee
Filed: June 23, 2000)
For: DEVICE STRUCTURES INCLUDING RUTHENIUM SILICIDE DIFFUSION
BARRIER LAYERS

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T. Flower

AMENDMENT AND RESPONSE
UNDER 37 CFR §1.116

Assistant Commissioner for Patents
Box AF
Washington D.C. 20231

Dear Sir:

The Final Office Action mailed September 14, 2001 has been received and reviewed.
Please amend the above identified application as follows:

In the Claims

Please amend claims 27, 32 and 36, and add new claims 39-44. The amended and new claims are provided below in clean form. Per 37 C.F.R. §1.121, amended claims are shown in Appendix A with notations to indicate changes made. For convenience, all pending claims, including those added hereby, are provided in Appendix A.

27. (Twice Amended) A semiconductor device structure, the structure comprising:
a substrate assembly including a surface; and
a chemical vapor deposited diffusion barrier layer over at least a portion of the surface,
wherein the diffusion barrier layer is formed of RuSi_x , where x is in the range of about 0.01 to about 10.